

# AQUATIC ADOPTION CARDS

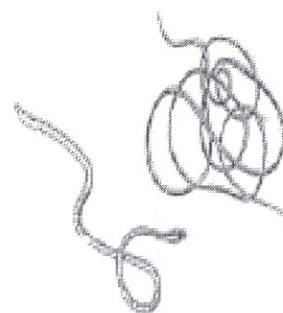
## A. Alderfly Facts

- Carnivorous and may bite
- Develop over period of one to three years
- Mouth has large, chewing pinchers
- Smooth underside without gill tufts
- Abdomen has strand-like appendages extending from each side
- Three pairs of segmented legs on middle section of body with tiny pinchers at the end of each
- Straight, single feathery tail
- 3/4 to 4 inches long
- Somewhat sensitive to water pollution



## B. Aquatic Worm Facts

- May be found in large numbers in organically polluted streams
- Moves by stretching and pulling its body along in a worm-like fashion
- May be red, ran, black or brown
- Can look like an earthworm or be much narrower and thread-like
- Segmented body
- Up to five inches long
- May have short bristles or hairs that help with movement, but are not usually visible
- Tolerant to water pollution



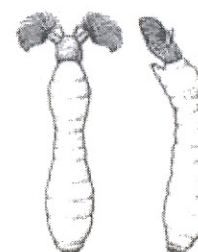
## C. Rifle Beetle Larva Facts

- Up to 3/4 inches long
- Body is long, hard, still, segmented
- Six long segmented legs on upper middle section of body
- Back end has two tiny hooks and short hairs
- Somewhat sensitive to water pollution



## D. Black Fly Larva Facts

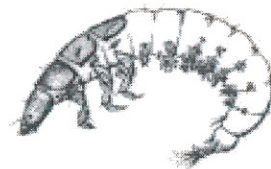
- Move by drifting downstream on silken threads that extend from the tip of the abdomen
- Often stuck by their attachment disks to the surface of rocks, sticks, or other debris in the streams
- Up to 1/3 inches long
- The head is usually black, but sometimes brown, tan, or green
- One very tiny leaf-like appendage directly under the head
- Attachment disks (small suckers) on the end of the abdomen
- Back end of the body widens and is bulbous
- No legs
- Tiny gills by head filter food from water
- Tolerant to water pollution



# AQUATIC ADOPTION CARDS CONTINUED

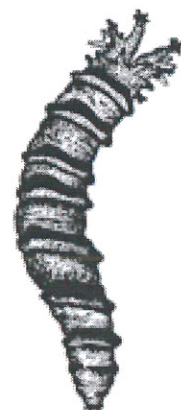
## E. Caddisfly Facts

- Some make houses or cases for themselves out of different materials such as rocks, sand, gravel, twigs, or leaves using a glue-like substance secreted from their back end
- Some spin webs to trap food from the flowing water
- Up to 1 1/2 inches long
- Very small or no antennae
- Six segmented legs on upper middle section of body
- Filamentous gills may be on the end of the body or on the underside
- Two small, thick extensions at the end of the body and each has a single hook at the end
- Although most species are very sensitive to pollution, some are pollution tolerant



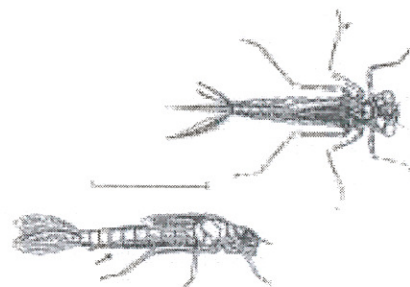
## F. Crane fly Facts

- Develop over a period of six weeks to five years
- Close to 300 species in North America
- Up to four inches long
- Head is usually retracted so the front end appears round
- Fleshy, plump, rounded segmented body
- Its digestive track (internal organs) can be seen moving back and forth as it crawls
- No legs
- Black end usually has several extensions or finger-like holes
- Milky, light-brown, gray, or greenish in color
- Somewhat sensitive to water pollution



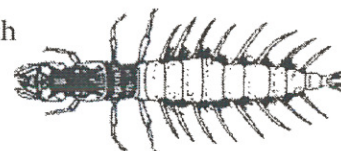
## G. Damselfly Facts

- Develop over one to four years
- Large eyes
- Large scoop-like lower lip
- No gills on the sides or underneath the abdomen
- Six long segmented legs on the upper middle section of the body
- 1/2-1 inch long
- Long spindly legs
- Somewhat sensitive to water pollution



## H. Hellgramite (or Dobsonfly) Facts

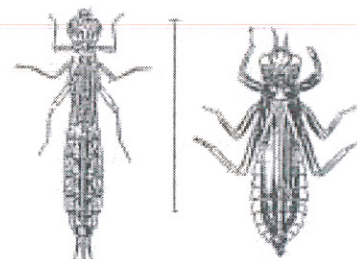
- Carnivorous and may bite
- One to four inches long
- Mouth has large, chewing pinchers
- Six segmented legs on middle section of body with tiny pinchers at the end of each
- Many fleshy, filamentous appendages on each side of the abdomen
- Back end is forked with two short tails and two hooks on each tail
- Gill tufts on the underside of the tail that look like "hairy armpits"
- Dark brown to black in color
- Often confused with fishfly but fishfly is smooth on underside with no gill tufts
- Very sensitive to water pollution



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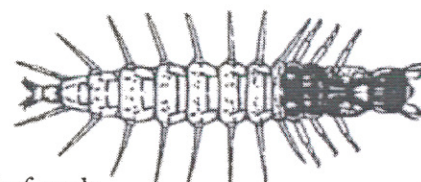
## I. Dragonfly Larva Facts

- Develop over one to four year period
- Large eyes
- Large scoop-like lower lip
- Wide oval or round abdomen that may end in three wedge-shaped extensions
- No gills on the sides or underneath
- 3/4 - 2 inches long
- Six long segmented legs on upper middle section of body
- **Somewhat sensitive to water pollution**



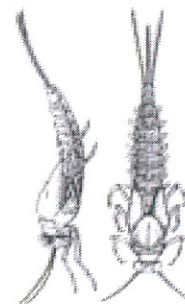
## J. Fishfly Facts

- Carnivorous and may bite
- Develop over period of one to three years
- Mouth has large, chewing pinchers
- Up to 1 and 1/2 inches long
- Three pairs of legs on middle section of body with tiny pinchers at the end of each
- Back end is forked with two short tails and two hooks on each tail
- Often confused with hellgrammite (dobson fly larva) but does not have fluffy gills on underside
- **Somewhat sensitive to water pollution**



## K. Mayfly Facts

- About 700 species in North America
- Develop in streams during a period of two weeks to two years
- Live on exposed rock surfaces in fast current or buried in soft stream beds
- Large numbers of flying adults may emerge from stream at the same time
- Plate-like or feathery gills along the sides of the abdomen
- Two or three long hair-like tails
- Six segmented legs on middle section of body
- The body can be up to one inch long
- Body is usually flat
- **Very sensitive to water pollution**



## L. Midgefly Facts

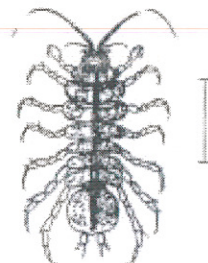
- Almost 200 species in North America
- Are found in all but the most polluted aquatic conditions
- Up to 1/2 inch long
- One pair of tiny, fleshy legs below the head and one pair on the back end
- The back end sometimes has a tiny pair of extensions that look like brushes
- A thick dark line (digestive tract) can be seen inside the body
- **Fairly tolerant to water pollution**



# AQUATIC ADOPTION CARDS CONTINUED

## M. Sowbug Larva Facts

- Also called the pillbug (adult stage)
- Up to 3/4 inches long
- Seven pairs of legs
- Dark brown to grey in color
- Two pairs of antennae (one pair is much longer than the other)
- Much wider than they are high and rather flat.
- Somewhat sensitive to water pollution



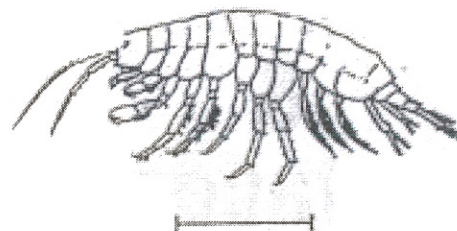
## N. Whirligig Beetle Larva Facts

- Pincher-like mouth parts
- Six segmented legs on middle section of the body
- The legs end in tiny claws
- Four hooks at the end of the body
- No tail
- Somewhat sensitive to water pollution



## O. Scud Larva Facts

- They swim rapidly on their sides and are nicknamed "side swimmers"
- Usually found where there are plants in the water
- Seven pairs of tiny segmented legs
- Two pairs of antennae
- Color is white to clear
- 1/4 to one inch long
- Resembles a freshwater shrimp
- Hard, plate-like shell except over the head and upper body
- Somewhat sensitive to water pollution



## P. Stonefly Larva Facts

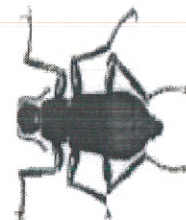
- Are found in cool, clean streams with high levels of dissolved oxygen
- Develop in the stream for period of three months to three years
- Are either predators or feed on fungi and bacteria from rotting leaves
- Two long antennae
- Two hair-like tails
- Six segmented legs on middle section of body
- 1/4-2 inches long
- Very sensitive to water pollution



# AQUATIC ADOPTION CARDS CONTINUED

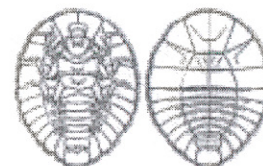
## Q. Riffle Beetle Facts

- Length is up to 3/4 inch long
- Body is long, hard, stiff, and segmented
- Six long segmented legs on upper middle section of body
- Back end has two tiny hooks and short hairs (may be hard to see)
- Very sensitive to water pollution



## R. Water Penny Facts

- Segmented plate-like covering
- Six tiny segmented legs beneath the round body
- Color is brown, black or tan
- The water penny is the aquatic larva of a beetle; the adult of the species is not aquatic
- The body is often stuck flat to surfaces and looks like a tiny round leaf
- Measures 1/4" diameter
- Very sensitive to water pollution



## S. Watersnipe fly Facts

- Body is tapered at the head end
- Up to two inches long
- Carnivorous and may bite
- Body has two feathery-like horns at the back end
- Many pairs of caterpillar-like legs on the underside
- Pale to green in color
- Somewhat sensitive to water pollution

